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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,260	03/28/2006	William Woulds		9740

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EXAMINER	
TOLAN, EDWARD THOMAS	
ART UNIT	PAPER NUMBER
3725	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/574,260	WOULDS, WILLIAM	
	Examiner	Art Unit	
	EDWARD TOLAN	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1,2 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheers et al. (5,692,409) in view of Blue (6,598,451). Cheers discloses an ironing tool set (8) comprising dies (1,3) having inserts (6) for ironing a can wall and coolant dies (5,10) adjacent the ironing dies (1,3). The coolant dies (5,10) have internal cavities (11,12) for circulating coolant. Each of the cavities (11,12) has a wide inlet and an outlet restriction spraying coolant adjacent the inserts (6). The die face facing a can wall where the coolant is sprayed through the coolant dies (5,10) adjacent inserts (6) as shown in figure 1 forms a cooling face. Cheers does not disclose that the coolant dies do not allow coolant into a bore of the dies. Blue teaches internal cool cavities comprising radially innermost imperforate channels (42,44,46,48,50) for supplying coolant and drawing off heat from a die face during working. It would have been obvious to one skilled in the art at the time of invention to provide Cheers with a die or cooling spacer insert having cooling channels as taught by Blue in order to draw heat away from the die face and control an ironing die or spacer temperature.

Claims 3,12,17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable Cheers et al. (5,692,409) in view of Blue (6,598,451) and further in view of

Scholey (6,776,021). Cheers in view of Blue does not disclose a vacuum port for removal of debris. Scholey teaches that it is known to remove debris via a vacuum port (44). It would have been obvious to one skilled in the art at the time of invention to provide Cheers in view of Blue with a debris collection port as taught by Scholey in order to continuously clear debris through the coolant system.

Claims 4-7,19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheers et al. (5,692,409) in view of Blue (6,598,451) and further in view of Main (4,223,544). Regarding claims 6 and 7, Cheers discloses a system (15,16,17) for biasing a cooling face against an ironing die comprising pistons (15) resiliently mounted on the dies, the pistons being activated by fluid pressure (column 4, lines 34-40).

Cheers in view of Blue does not disclose that a cooling face is inclined toward a die insert. Main teaches that lubrication/cooling die (42) has an inclined face (54) towards an adjacent die insert (34). Main teaches debris washing by jet nozzles (col. 3, lines 5-10 and 55-60). It would have been obvious to one skilled in the art at the time of invention to incline the cooling face of Cheers in view of Blue toward the die insert as taught by Main in order to focus the flow near the die insert.

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheers et al. (5,692,409) in view of Blue (6,598,451) and further in view of Blue (6,598,450). Cheers in view of Blue ('451) does not disclose a cooled punch. Blue ('450) teaches that it is known to have inner (8) and outer (10) tubes in a ram (4) for the purpose of cooling the ram. It would have been obvious to one skilled in the art at the

time of invention to provide Cheers in view of Blue ('451) with ram cooling means as taught by Blue ('450) in order to control a temperature of the punch.

Response to Arguments

Applicant's arguments filed 10-16-2008 have been fully considered but they are not persuasive. Applicant has amended to include limitations concerning coolant not contacting a surface of a container during ironing. Cheers teaches ironing dies and cooling spacers each having internal cooling channels and Blue teaches dies having closed channels not open to a die bore. The Examiner's position is that based upon the type of container coating used either coolant (Cheers) or no coolant (Blue) is supplied to the die bore and either way is known and would have been obvious to the skilled artisan at the time of invention. Providing ironing dies with spacers next to the dies is also known from Cheers and Blue.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

/Edward Tolan/

Primary Examiner, Art Unit 3725